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(54) ABRASIVE AND METHOD FOR POLISHING SUBSTRATE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an abrasive that has high utility for shallow trench isolation and can polish a substrate without defects and also a method for polishing a substrate, which has high utility for shallow trench isolation and wherein a surface of the substrate to be polished can be polished without suffering defects.

SOLUTION: The abrasive comprises abrasive grains, a surface active agent and water wherein a ratio between a silicon oxide film polishing rate and a silicon nitride film polishing rate is 100 or over. The abrasive is made of a mixture of a cesium oxide slurry containing cesium oxide particles, a dispersant and water with an additive solution containing a surface active agent and water wherein a ratio between the silicon oxide film polishing rate and the silicon nitride film polishing rate should preferably be 100 or over. The method for polishing a substrate comprises urging and pressurizing a polishing cloth of a polishing tool against a substrate formed with a film thereon, and polishing the film to be polished by movement of the substrate and the polishing tool while supplying the abrasive between the film and the polishing cloth.

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